#### **MOUNJARO INFORMATION SHEET**

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May 2024

### What is Mounjaro (Tirzepatide)?

Over twenty years ago hormone researchers discovered a hormone called GLP-1 which was known to promote insulin action and reduce blood sugar levels. A form of GLP-1 was found in large quantities in the saliva of a large venomous lizard (called a Gila Monster) who lives in the Arizona desert which is known to eat infrequently. This discovery allowed scientists to synthesise a mimic of GLP-1 which was injectable into subcutaneous tissue and lasted for a long time in the body. These drugs were called "incretins".

Mounjaro (or Tirzapatide) is the latest version of the injectable incretins and this activates two gut hormone receptors simultaneously: It is a mimic of both GLP-1 combined with a mimic of another gut hormone called GIP. Activating both GLP-1 and GIP hormones simultaneously increases the body's production of insulin and decreases the sugar produced by the liver, thereby lowering blood sugar. By also targeting the appetite centres of the brain, it creates a sense of fullness and has been shown to be a very effective weight loss drug.

### How different is Mounjaro from Ozempic/Wegovy?

Semaglutide (brand name either Ozempic or Wegovy) is only a mimic of GLP-1 not a dual targeted incretin. There is evidence that Mounjaro is more effective in aiding weight loss. In one study those individuals who tolerated the highest dose (15mg weekly) lost an average of 15-20% of their body weight in 12-18 month compared with 10-15% with Semaglutide.

People being treated with Mounjaro (Tirzepatide) or Semaglutide (Ozempic/Wegovy) describe a change in their relationship with food which allows their lifestyle efforts to be rewarded. Those who are being treated may require a long-term intervention with the drug to sustain any weight loss achieved. It must also be remembered that up to 10-10-15% of people do not lose weight or who are unable to tolerate the drug.

#### Who is Mounjaro for?

Although currently licenced to treat people living with type 2 diabetes, it has been shown to be a very effective weight losing drug in individuals with pre-diabetes or the "metabolic syndrome" i.e., those people with genetic markers of insulin resistance who have had a lifelong struggle with weight management. The typical features associated with insulin resistance are high blood pressure, high cholesterol, pre-diabetes or type 2 diabetes, central obesity, gout, polycystic ovary syndrome and obstructive sleep apnoea.

#### Who is Mounjaro not for?

It is not for people with normal or slightly above normal weight who desire further weight loss for cosmetic reasons. Any weight loss achieved is likely to be regained within two years of stopping the drug. It is not safe in pregnancy so needs to be stopped six weeks prior any pregnancy attempt. It is not known if it is safe in breast-feeding.

### What are the side effects?

Common side-effects are similar to those described with Semaglutide which include feeling sick, indigestion, constipation, and diarrhoea, while less common side effects are reported as gallstones and pancreatitis. The available long-term data for the incretins is very encouraging with no confirmed risk of pancreatic or thyroid cancer and early excellent outcomes in terms of reduced cardiovascular risk and within five years of starting the drug. The GLP-1 agonists have recently been shown to protect kidney function.

### Is Mounjaro available on prescription?

Mounjaro can be prescribed within the NHS in the UK to treat type 2 diabetes. It is usually prescribed when other medications have proved ineffective in managing diabetes, because of side-effects or because of other medical conditions. It has been specifically targeted to those people living with diabetes who are overweight (BMI more than 35Kg/m2). It is not licenced for people living with obesity without diabetes or those with pre-diabetes. However, it can be prescribed via a private prescription for those unable to access it via the NHS with the current cost approximately £150 per month.

# Can I take Mounjaro with other medication?

Mounjaro may affect the way some medicines work. Mounjaro delays gastric emptying, and thereby has the potential to impact the absorption of oral medications taken at the same time. If you take birth control pills by mouth, you may be recommended another type of birth control for four weeks after you start Mounjaro and for four weeks after each dose increase. Hormonal contraceptives that are not administered orally should not be affected.

#### How to take Mounjaro

Mounjaro comes in a pre-filled injection pen with a small needle, called the Mounjaro Kwikpen. It is injected once a week into the subcutaneous tissue of either your abdomen, thigh or upper arm. It can be given at any time of the day and. You are recommended to change the injection site with each weekly injection. Avoid injecting other medication at the same site and time as injecting Mounjaro. Mounjaro can be taken with or without food. Read the Instructions for Use and package leaflet before starting Mounjaro.

#### **Dose of Mounjaro**

The Mounjaro Kwikpen is available in different strengths. The starting dose is 2.5mg and gradually increased, providing you can cope with any side effects. You stay on each dose for at least four weeks before increasing the dose. If continuing to lose weight stay with the same dose. Your doctor will advise on the dose to take.

Example of a treatment plan:

Weeks 1-4:	2.5mg
Weeks 4-8:	5mg
Weeks 8-12:	7.5mg
Weeks 12-16:	10mg

You can change the day Mounjaro is injected, providing the time between the two doses is at least three days (72 hours). Do not take two doses of Mounjaro within three days of each other.

If a dose is missed, take the missed dose as soon as possible, within four days (96 hours) of the missed dose. If more than four days have passed skip the missed dose and take your next dose as planned. If you have taken too much Mounjaro contact your healthcare team.

## How to store the Mounjaro Kwikpen

- Keep unused pens in the refrigerator at 2°C to 8°C (36-46°F)
- Do not freeze. Discard if frozen

After taking your first dose:

- Mounjaro Kwikpens can be kept at room temperature up to 30°C (86°F)
- Keep pens in their original carton to protect from light
- After use remove the needle to prevent leaking, blocking of the needle and air entering the pen
- Store pens with the cap attached
- Discard the pen after the four weekly doses.
- Do not use the pen more than 30 days after first use
- Handle the pen carefully, if dropped on a hard surface discard and start another pen.
- Check the regulations in your area on how to dispose of the pen and needle

# Do I need to monitor my blood sugar levels?

As with any change in treatment monitor your blood sugar levels more closely, particularly if you are at risk of hypoglycaemia (hypo or low blood sugar). Mounjaro used in combination with for example a sulfonylurea or insulin may increase the risk of hypos. The dose of these medications may need to be lowered to reduce the risk of hypos. There is no need to measure sugar levels if you do not have type 2 diabetes.

# Informing the DVLA I am taking Mounjaro

There are currently no specific driving restrictions for Group 1 Car or motorcycle licences for people using Mounjaro. Taking Mounjaro with e.g a sulphonylurea or insulin can increase the risk of hypos. Always test your blood sugar level before driving and during a long car journey. Notify the DVLA if you have any concerns.

If you have a Group 2 licence and take Mounjaro in combination with a medication that increase your risk of hypos for example, a sulphonylurea then you need to notify the DVLA. DVLA with your consent, will seek further information from your healthcare team.

# Travelling with Mounjaro

- Mounjaro can be kept outside of the refrigerator for up to 21 days
- When using a travel cooler, ensure the medication does not touch ice, frozen gel packs or reach freezing temperatures

- Keep your medication with you in your carry-on luggage.
- Checked in luggage placed in the hold area can experience temperatures outside of the recommended range
- X-ray screening machines at airport security are not known to affect Mounjaro
- Carry a medical equipment travel letter

## Mounjaro is used with caution if:

- Have or have had problems with your pancreas.
- Have severe problems with your stomach, such as slowed emptying of your stomach (gastroparesis) or problems with digesting food.
- History of severe diabetic retinopathy.
- Had a serious allergic reaction to Tirzepatide or any of the ingredients in Mounjaro